## **ABSTRACT**

The present invention discloses a A method to have of a real time data communication between a first user (U1) of a source (S) and a second user (U2) of a destination (DT) via a real time data over Internet-Protocol communication network. The method comprises, including the steps of transmitting by a transmitting means (TR) of the source (S) at least two packets (T1, T2, T3, T4)-from source to the destination (D), and determining by a receiving means (REC) of the destination (D) for each one (T2) of the at least two packets (T1, T2, T3, T4), time information (T2 t2) related to a receiving time (t2) of the packet (T2). The method further comprises applying by the transmitting means (TR) for each one (T2) of the packets (T1, T2, T3, T4) The source applies a predefined packet length (12) out of a plurality of packet lengths (11, 12, ..., li) in order to be transmitted accordingly. A first determining means (DET1) to each packet, and the destination determines, according to each the determined time information (T1-t1, T2-t2, T3-t3, T4 t4) associated to the packets (T1, T2, T3, T4) of the receiving means (REC), and according to each predefined the packet length (11, 12, 13, 14) associated to the packets, the characteristics of a first relation  $(fl(T, \alpha))$  between a packet length of a packet to be transmitted from the source (S) to the destination (D) and a source to destination delay (d-S2D) being a time period between the transmission of said packet by the source (S) and reception of the packet by the destination (D). A second determining means (DET2) The destination also determines a preferred mouth to ear delay (d-M2E-pref) according to a preferred quality rating (Q-pref) for the real time data communication (C). A third determining means (DET3), and also determines an optimal packet length to be used by the source (1-opt) for the preferred mouth to ear delay (d-M2E-pref) and according to the characteristics of the first relation  $(fl(T, \alpha))$  in order to be applied by the source (S) for packets being transmitted during the real time data communication.